

The following White Papers provide additional detail about managing delays.

- [Understanding Preproduction Delays in Fire Program Analysis IR\\_005\\_WP](#)
- [Understanding Smokejumper Deployment in Fire Program Analysis IR\\_004\\_WP](#)
- [Understanding Helicopter Use in Fire Program Analysis IR\\_006\\_WP](#)
- [Understanding Dozers, Tractor Plows, and Airboats in Fire Program Analysis Initial Response Simulation Module IR\\_019\\_WP](#)

## Data Requirements for Managing Delays

Enter the following information into FPA before managing delays:

- FPU/FMU/FWAs as entered in **Set Up FPU >FPU Attributes**, **Set Up FPU > FPU Agencies**, **Set Up FPU > Define Team** screens.
- Resources as entered in **Input Data > Define Resources** screen.
- Dispatch Locations as entered in **Input Data > Define Dispatch Locations** screen.

## In This Chapter

This chapter discusses how to [assign delays to a Fire Planning Unit \(FPU\), Fire Management Unit, \(FMU\) and/or Fire Workload Area \(FWA\)](#).

# FPA Users Guide

## Managing Delays

Use this screen to set delays for a Fire Planning Unit (FPU), Fire Management Unit (FMU), and/or Fire Workload Area (FWA). FPA reduces data entry time by allowing Fire Planners to enter values for an FPU or FMU and have those identical values automatically entered into the system for their associated FWAs.

## Assigning Delays to a Fire Planning Unit (FPU), Fire Management Unit (FMU), and/or Fire Workload Area (FWA)

### Consideration

- The system displays delay values only at the FWA levels. Users can define delays at the FPU level. When doing this, the delays apply to all FMUs and FWAs within the FPU. Users can also define delays at the FMU level. These delays values apply to all FWAs within the FMU.

1. Select **Input Data > FWAs > Define Delays**.

Displays the FWA Delays screen.


	Walk-In	Post-Contained Fire Used	Post-Contained Fire Unused	Post-Escaped Fire
Tracked	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Boat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Crew	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Engine	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
HELI	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
SMJR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	SCP	SEAT	Engine	Helicopter
Reload Delays	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	First Unit
Miscellaneous Delays	<input type="text"/>

2. Click the cross next to the Team Name,  to expand the folder and display FMUs and FWAs.
3. In the Select an FWA box, scroll and highlight the appropriate FPU, FMU, or FWA you want to edit. The FPU, FMU, or FWA name highlights with a blue background.

- Click .

The FWA Delays screen refreshes and enables all textboxes.

	Walk-In	Post-Contained Fire Used	Post-Contained Fire Unused	Post-Escaped Fire
Tracked	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Boat	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Crew	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Engine	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
HELI	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
SMJR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	SCP	SEAT	Engine	Helicopter
Reload Delays	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**First Unit**

Miscellaneous Delays:

- Accept the displayed values, or enter new or modified delay information.

The value for all delays must be between 0 and 9999 minutes.

### Column Title Definitions

- Walk-in:** This delay represents the typical time, at the conclusion of Set-up Delay, for fire resources to travel cross-country to fires in FMUs or FWAs. A fire planning team should determine the Walk-in Delay based on a general or typical time it takes to walk into a fire. This means that if an engine is defined in the dispatch logic and is to be used in the fire containment, then a part of its arrival time calculation is the walk-in delay. The walk-in delay is applied to the fires identified by the FWA Attribute of **Walk-in %**. The engine's production rate is the same as the dry or handcrew production rate. It is applied based on the daily staffing. For smokejumpers (SMJR) and helitack (HELI), the walk-in delay is the typical time it takes the fire resource to walk from the landing zone to the fire. Tracked vehicles delays represent the typical time it takes within the FMU or FWA to walk into the fire event after the crew unloads and are ready to walk to the fire. The system handles fireboats like an engine in that the walk-in delay represents the typical time to walk to the fire after crews have traveled as far as possible by boat.

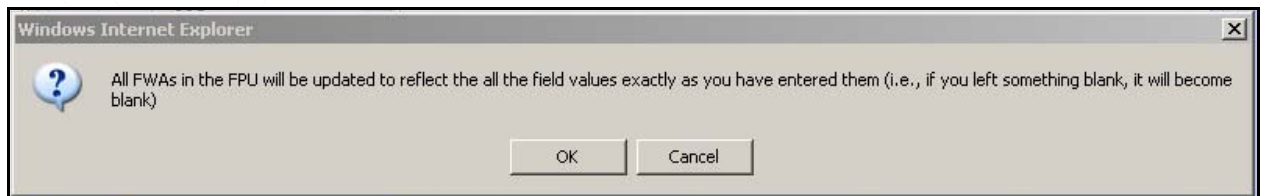
# FPA Users Guide

## Managing Delays

- **Post-Contained Fire Used:** This delay applies to resources dispatched to a modeled fire event that produce fireline, and then contain the fire event. Fire Planners enter the amount of time the resources are delayed until it is available for dispatch (from its dispatch location) to another modeled fire event after containing the initial fire. The system does not calculate travel time from the fire event back to the Dispatch Location, so planners may want to include this time as part of the delay.
- **Post-Contained Fire Unused:** This delay applies to resources dispatched to a modeled fire event, but the event was contained before the resources were used. The FPU Planner enters the amount of time resources are delayed until they are available for dispatch, from their dispatch location, to another modeled fire event.
- **Post-Escaped Fire:** This delay begins after a fire has exceeded simulation limits. It applies to all resources (whether or not they constructed fire line), dispatched to a modeled fire event where the initial fire event exceeded the simulation limits for either size or time. Fire Planners enter the time from when the fire event exceeds the simulation limit until the fire resource is available for dispatch, from its dispatch location, to another modeled fire event. The system does not calculate return travel time.
- **Reload Delays:** Represents the typical times (in minutes) for a producer type to depart a fire event, refill, and return to the fire. For SCP's (scoopers) this value represents the typical time to get to a body of water suitable for the scooper to load on. For Single Engine Airtankers (SEAT's), this value represents the typical time to get from a fire to a suitable landing site, field, or airport to load and return to the fire. When a water tender is present, engines do not need to reload. For helicopters, this delay value is the typical time it takes a helicopter to depart a fire in the FWA, fly to a suitable fill site, fill their bucket or tank, and return to the fire.
- **First Unit :** This delay represents the typical time for the first arriving fire resource to size up the fire, identify escape routes, and best travel route to the fire. This value is entered by the FPA Editor and applies regardless of dispatch logic and resource type.

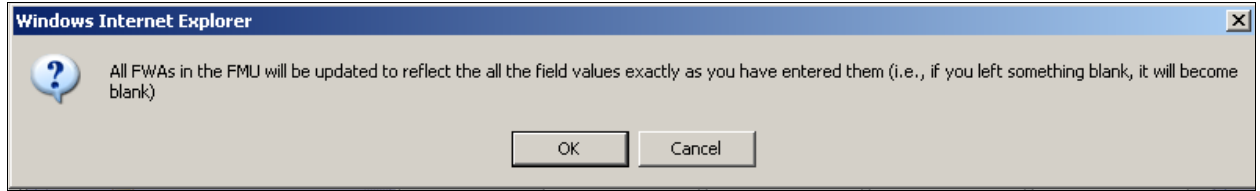
6. After entering the appropriate delays, click  to save the information and update the database.



- When a user enters delays at the FPU level, the global update box displays.



Click  to continue the global update, or click  and return to the FWA Delays box. After the database update, users can return to edit values in FWAs as needed.

- When a user enters delays for an FMU, the global update box displays.



Click  to continue the global update, or click  and return to the FWA Delays box. After the database update, users can return to edit values in FWAs as needed.

Click  to return to the FWA Delays box. No database updates occur.

Users return to FWA Delays box.